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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,103	03/26/2001	Rabindranath Dutta	AUS9-2001-0047-US1	7735
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IBM CORPORATION (PH) C/O PAUL D. HEYDON, PATENT ATTORNEY 3004 NACOGDOCHES ROAD SAN ANTONIO, TX 78217			EXAMINER POPHAM, JEFFREY D	
			ART UNIT 2137	PAPER NUMBER

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/817,103	DUTTA, RABINDRANATH	
	Examiner	Art Unit	
	Jeffrey D. Popham	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08/20/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>20010326</u> . | 6) <input type="checkbox"/> Other: ____. |

Remarks

1. Claims 1-30 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 5, 8, 17, 18, 21, 22, 24, 25, 28, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Shub et al. (U.S. Patent 6,807,530).

Regarding Claim 1,

A method for secure delivery of a parcel or document from a sender to a recipient, comprising:

Providing at least one private-public encryption key pair for the recipient (Column 6, lines 22-28);

Encrypting data with a public key, of the private-public key pair (Column 6, lines 34-41 and Column 6, line 66 to Column 7, line 1);

Providing the encrypted data for display on an envelope containing the parcel or document (Fig. 4 and Column 6, line 62 to Column 7, line 3);

Decrypting the encrypted data with a private key, of the private-public key pair, to yield the recipient's address (Column 7, lines 1-2); and

Delivering the parcel or document to the recipient (Column 5, lines 60-61).

Regarding Claim 17,

A system for secure delivery of a parcel or document from a sender to a recipient, said system comprising:

Means for providing at least one private-public encryption key pair (Column 6, lines 22-28);

Means for encrypting data with a public key, of the private-public encryption key pair (Column 6, lines 34-41 and Column 6, line 66 to Column 7, line 1);

Means for providing the encrypted data for display on an envelope containing the parcel or document (Fig. 4 and Column 6, line 62 to Column 7, line 3);

Means for decrypting the encrypted data with a private key, of the private-public encryption key pair (Column 7, lines 1-2).

Regarding Claim 18,

The system of claim 17, wherein the means for encryption further comprises means for encrypting the recipient's address with the public key (Fig. 4 and Column 6, line 62 to Column 7, line 3).

Regarding Claim 21,

The system of claim 17, wherein the encrypted data is displayed on the envelope by a delivery agency (Column 6, lines 37-39).

Regarding Claim 22,

The system of claim 17, further comprising means for displaying a non-encrypted identifier of the parcel or document on the envelope (Fig. 4; identifier as order number).

Regarding Claims 2, 5, and 8,

Claims 2, 5, and 8 are method claims that are substantially equivalent to system claims 18, 21 and 22, respectively. Therefore, claims 2, 5, and 8 are rejected under a similar rationale.

Regarding Claims 24, 25, 28, and 29,

Claims 24, 25, 28, and 29 are computer-usable medium claims that are substantially equivalent to system claims 17, 18, 21, and 22, respectively. Therefore, claims 24, 25, 28, and 29 are rejected under a similar rationale.

4. Claims 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Pintsov (U.S. Patent 5,586,036).

Regarding Claim 15,

A method for secure delivery of a parcel or document from a sender [mailer] to a recipient [mail processing service] comprising:

Providing at least one private-public encryption key pair for the sender (Column 4, lines 9-12);

Encrypting data unique to the sender with the private key of the sender's key pair (Column 4, lines 35-42);

Providing the encrypted sender's data for display on an envelope containing the parcel or document (Column 4, lines 42-45);

Delivering the parcel or document to the recipient (Column 4, line 46); and

Decrypting the encrypted sender's data with the sender's public key, of the sender's key pair (Column 4, lines 46-54).

Regarding Claim 16,

Encrypting further comprises:

Encrypting the sender's identifying information (Column 4, lines 35-42). Here, Pintsov does not disclose encrypting the sender's address, but he does disclose encrypting the identification number of the sender. One of ordinary skill in the art would realize that the identification number of the sender correlates to the sender's name and address.

Generating a digital signature (Column 6, lines 63-65); and

Decrypting further comprises verifying that the sender sent the parcel or document to the recipient (Column 7, lines 4-6).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3, 10, 11, 12, 19, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shub et al. (U.S. Patent 6,807,530) in view of Mitty et al. (U.S. Patent 6,145,079).

Regarding Claim 19,

Shub et al. disclose encryption of the recipient's address, but do not disclose use of a symmetric encryption key.

Mitty et al., however, disclose the following:

Means for providing at least one symmetric encryption key for the recipient (Column 4, lines 2-4);

Means for encrypting information with the symmetric key (Column 4, lines 2-4); and

Wherein the means for encrypting data with a public key further comprises means for encrypting the symmetric key with the public key (Column 4, lines 4-9).

This new system would be the system of Shub et al. using their public key encryption method to encrypt the symmetric key of Mitty et al.

as well as encrypting the recipient's address with both the public key and the symmetric key.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to use symmetric key encryption as well as public key encryption in the system of Shub et al. in order to obtain the benefits from both methods. One of ordinary skill in the art would have been motivated to do so in order to obtain the computational speed benefits of symmetric key encryption while sharing the symmetric key in a secure way through public key encryption (Column 4, lines 15-19).

Regarding Claim 3,

Claim 3 is a method claim that is substantially equivalent to system claim 19. Therefore, claim 3 is rejected under a similar rationale.

Regarding Claim 26,

Claim 26 is a computer-usable medium claim that is substantially equivalent to system claim 19. Therefore, claim 26 is rejected under a similar rationale.

Regarding Claim 10,

Shub et al. disclose the following:

A method for secure delivery of a parcel or document from a sender to a recipient comprising:

Providing at least one encryption key for the recipient (Column 6, lines 22-28);

Encrypting the recipient's address with the encryption key (Column 6, lines 34-41 and Column 6, line 66 to Column 7, line 1);

Displaying the encrypted address on an envelope containing the parcel or document (Fig. 4 and Column 6, line 62 to Column 7, line 3);

Decrypting the encrypted address with the encryption key to yield the recipient's address (Column 7, lines 1-2);

Delivering the parcel or document to the recipient (Column 5, lines 60-61).

Shub et al. do not disclose the use of symmetric keys.

Mitty et al., however, disclose the use of symmetric keys in encryption (Column 3, lines 44-48). This new system would be the system from Shub et al. using the same (symmetric) key for both encryption and decryption, as opposed to having a separate key for each.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to use symmetric key encryption in order to provide for a much faster algorithm for use in the system. One of ordinary skill in the art would have been motivated to do so in order to obtain computational speed advantages over public key encryption (Column 4, lines 15-17).

Regarding Claim 11,

Shub et al. disclose that the encrypted address comprises a post office box number (Column 3, lines 8-12).

Regarding Claim 12,

Shub et al. disclose the displaying of a non-encrypted identifier of the parcel or document on the envelope (Fig. 4; identifier as order number).

7. Claims 4, 7, 20, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shub et al. (U.S. Patent 6,807,530) in view of Hurwitz et al. (U.S. Patent 6,748,366).

Regarding Claim 20,

Shub et al. do not disclose that the encrypted data is displayed on the envelope by the sender.

Hurwitz et al., however, disclose that a label with the encrypted data is attached to the package by the sender (Column 4, lines 22-27). This new system would be the system of Shub et al. attaching the label with encrypted data to the package at the sender/merchant.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have the sender put the encrypted data on the package in order to provide for buyer anonymity from the seller. One of ordinary skill in the art would have been motivated to do so in order to prevent the seller from deciphering the label and, thus, from determining information about the buyer.

Regarding Claim 4,

Claim 4 is a method claim that is substantially equivalent to system claim 20. Therefore, claim 4 is rejected under a similar rationale.

Regarding Claim 27,

Claim 27 is a computer-usable medium claim that is substantially equivalent to system claim 20. Therefore, claim 27 is rejected under a similar rationale.

Regarding Claim 7,

Shub et al. do not disclose that the decryption is done at the delivery agency.

Hurwitz et al., however, disclose that the decrypting is done by a delivery agency, shortly after receiving the parcel or document from the sender (Column 5, lines 9-20). This new system would be the system from Shub et al. consolidating the delivery agency and payment agency into one entity.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have the delivery agency decrypt the shipping information shortly after receiving the package in order to allow for less entities that the package must go through in order to reach its destination. One of ordinary skill in the art would have been motivated to do so in order to condense the functions of the delivery agency and the payment agency (trusted intermediary) to be consolidated into one entity.

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8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shub et al. (U.S. Patent 6,807,530) in view of Madruga (U.S. Patent 6,138,910).

Shub et al. do not disclose that the decrypting is done by a delivery person, shortly before delivery of the parcel or document.

Madruga, however, discloses that the indicia containing delivery information is scanned just before delivery of the parcel (Column 4, lines 17-20). This new system would be the system from Shub et al. scanning the parcel just before delivery.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to scan the parcel just before delivery in order to transmit delivery information with a central station. One of ordinary skill in the art would have been motivated to do so because it is common practice (Column 4, lines 22-26).

9. Claims 9, 13, 14, 23, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shub et al. (U.S. Patent 6,807,530) in view of Klein (U.S. Patent 6,259,367).

Regarding Claim 23,

Shub et al. disclose the use of decryption to obtain the recipient's address, but do not disclose information regarding the makeup or interactions of the computer network.

Klein, however, discloses that the means for decrypting further comprise:

At least one client computer in communication with a computer network (Column 8, lines 41-49);

Means for providing input of data from a package to the client computer, (Column 6, lines 13-14 and Column 7, lines 40-42);

Means for providing input to the client computer from a server computer over the computer network (Column 9, lines 9-20); and

Means for providing output from the client computer (Column 9, lines 42-44).

This new system would be the system of Shub et al. communicating information about the label over a network.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to provide for communication across a network in this system in order to provide a single server that can be contacted in order to decrypt information. One of ordinary skill in the art would have been motivated to do so in order to have a setup wherein client computers in different locations could contact the same server in order to obtain recipient information, such as mailing address (Column 11, lines 17-23).

Regarding Claim 9,

Claim 9 is a method claim that is substantially equivalent to system claim 23. Therefore, claim 9 is rejected under a similar rationale. .

Regarding Claim 30,

Claim 30 is a computer-usable medium claim that is substantially equivalent to system claim 23. Therefore, claim 30 is rejected under a similar rationale.

Regarding Claim 13,

Shub et al. disclose an encryption method for secure delivery of a parcel or document from a sender to a recipient comprising:

Providing at least one private-public encryption key pair for the recipient (Column 6, lines 22-28);

Encrypting data with a public key of the private-public key pair (Column 6, lines 34-41 and Column 6, line 66 to Column 7, line 1);

Displaying the encrypted data on the envelope containing the parcel or document (Fig. 4 and Column 6, line 62 to Column 7, line 3).

Shub et al. do not disclose a computer network wherein the encryption system could be used.

Klein, however, discloses a computer network in which to use this encryption system, including:

Providing at least one server computer in communication with a computer network (Column 6, lines 32-36);

Storing the encrypted data on the server (Column 9, lines 15-20);

Receiving a request for the data from a client computer of the computer network (Column 8, line 65 to Column 9, line 1); and

Transmitting the requested data from the server to the client computer over the computer network (Column 9, lines 9-12).

This new system would be the system of Shub et al. communicating information about the recipient over a network.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to use the client-server communications as described in Klein with the encryption and decryption system of Shub et al. in order to provide a single server that can be contacted in order to decrypt/obtain information about the recipient. One of ordinary skill in the art would have been motivated to do so in order to have a setup wherein client computers in different locations could contact the same server in order to obtain recipient information, such as mailing address (Column 11, lines 17-23).

Regarding Claim 14,

Shub et al. disclose an encryption method for secure delivery of a parcel or document from a sender to a recipient comprising:

Providing at least one private-public encryption key pair for the recipient (Column 6, lines 22-28);

Encrypting data with a public key of the private-public encryption key pair (Column 6, lines 34-41 and Column 6, line 66 to Column 7, line 1);

Decrypting the encrypted data with a private key of the private-public encryption key pair to yield the recipient's address (Column 7, lines 1-2);

Delivering the parcel or document to the recipient (Column 5, lines 60-61).

Shub et al. also disclose that the information being encrypted and decrypted relates to the recipient's address (Column 7, lines 1-2).

Shub et al. do not disclose a computer network wherein the encryption system could be used.

Klein, however, discloses a computer network in which to use this encryption system, including:

Providing at least one server computer in communication with a computer network (Column 6, lines 32-36);

Transmitting a request to the server from a client computer of the computer network (Column 8, line 65 to Column 9, line 1);

Providing the requested information to a delivery person via the client computer (Column 9, lines 9-12).

This new system would be the system of Shub et al. communicating information about the recipient over a network.


It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to use the client-server communications as described in Klein with the encryption and decryption system of Shub et al. in order to provide a single server that can be contacted in order to decrypt/obtain information about the recipient. One of ordinary skill in the art would have been motivated to do so in order to have a setup wherein client computers in different locations could contact the same server in order to obtain recipient information, such as mailing address (Column 11, lines 17-23).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey D. Popham whose telephone number is (571)-272-7215. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571)-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Andrew Caldwell